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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------------|---------------------|------------------|
| 10/735,196 | 12/11/2003 | Marcus Darren Gruetzmacher | 33278.3.02 | 2605 |
| 22511 | 7590 | 07/14/2006 | EXAMINER | |
| OSHA LIANG L.L.P. 1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010 | | | A, PHI DIEU TRAN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3637 | |

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/735,196 | Applicant(s) MARCUS DARREN GRUETZMACHER | |
| | Examiner Phi D. A | Art Unit 3637 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 2, 12, 14-29 and 36-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11, 13 and 30-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election of figure 5 to claims 1, 3-11, 13, 30-35 in the reply filed on 4/20/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 2, 12, 14-29, 36-39 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species of figures 1, 4, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/20/06.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaburri (3938294).

Gaburri discloses a method of reinforcing a tower (2) comprising forming a reinforcing column including applying a fluid (col 2 lines 41-43) reinforcing material to embed a vertical length of the tower, holding the fluid reinforcing material in place along the vertical length of the tower until it solidifies to form the column having the length of tower embedded therein, the fluid material comprising wet concrete cement (col 2 line 43), embedding a plurality of spaced apart tension cables (col 2 lines 45-46) into and extended vertically through the column, applying

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the fluid reinforcing material comprising pouring the fluid material into a mold (7) around the tower.

5. Claims 1, 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiraishi et al (4743142).

Shiraishi et al discloses a method of reinforcing a tower (1) comprising forming a reinforcing column (9) including applying a fluid reinforcing material (10) to embed a vertical length of the tower, holding the fluid reinforcing material in place along the vertical length of the tower until it solidifies to form the column having the length of tower embedded therein, the tower is a monopole tower comprising a metal tubular structure (the metal structure inherently is capable of functioning as a monopole tower).

6. Claims 8-9, 30-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hay (1947413).

Hay discloses a method of reinforcing a tower (11) comprising forming a mold (14) in the shape of a column around a portion of the tower, pouring wet concrete cement into the mold, allowing the cement to at least partially solidify in the mold, releasing the mold from the cement so that a concrete reinforcing column is formed encapsulating the tower, forming the mold further comprising forming a cylindrical shaped mold, forming a mold around a lower portion of the monopole tower to form a lower column section, releasing the mold from the lower column section, raising the mold and positioning the mold at an upper portion of the tower contiguously with the lower portion of the tower, molding an upper column section contiguous with the lower column section, forming a mold from the bottom of the monopole tower to a desired height of

the concrete column, releasing the mold from the concrete reinforcing column, the concrete column formed extending only partially along the entire vertical length of the tower.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaburri (3938294).

Gaburri shows all the claimed method steps including the step of pouring the reinforcing material onto the vertical length of the tower.

Gaburri does not disclose the step of spraying the material onto the vertical length of the tower.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gaburri's steps to show the step of spraying the material onto the vertical length of the tower because filling a mold with cementitious material by pouring, or spraying is well known in the art as they are both well known method of filling a structure with concrete.

9. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hay (1947413).

Hay shows all the claimed method steps except for the step of forming the column extending the entire vertical length of the tower.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hay's method step to show the step of forming the column extending the

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entire vertical length of the tower because it would allow for the covering and protecting of the entire column if needed.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hay (1947413) in view of Jackson (4104868).

Hay shows all the claimed method steps except for the step of molding a plurality of spaced apart tension cables into and extending vertically through the reinforcement column.

Jackson discloses the step of molding a plurality of spaced apart tension cables into and extending vertically through the reinforcement column.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hay's method step to show the step of molding a plurality of spaced apart tension cables into and extending vertically through the reinforcement column because having spaced apart tensioned cables would reinforce the concrete structure as taught by Jackson.

11. Claims 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hay (1947413) in view of Jackson (4104868) as applied to claim 10 above and further in view of Norton et al (4452028).

Hay shows all the claimed method steps except for the step of providing tensioners for tensioning the tension cables from the top of the column.

Norton et al discloses tensioners for tensioning the cables from the top of a structure.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hay's method step to show the step of providing tensioners for tensioning the tension cables from the top of the column as taught by Norton et al because having tensioners

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would allow for the tensioning of the cables when needed, and having tensioned cables on a concrete column would reinforce the concrete better than non-tensioned cables.

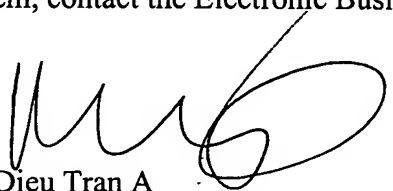
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different molding device and methods thereof.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Phi Dieu Tran A

7/10/06.